



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

Table of Contents

Chapter 1 Administration	Chapter 2 Definitions
Chapter 3 General Regulations	Chapter 4 Fixtures, Faucets, & Fittings
Chapter 5 Water Heaters	Chapter 6 Water Supply & Dist.
Chapter 7 Sanitary Drainage	Chapter 8 Ind./Special Waste
Chapter 9 Vents	Chapter 10 Traps, Inter. & Sep.
Chapter 11 Storm Drainage	APPENDIX A-H
Policy Statements	OTHER

100 Chapter 1 Administration

102.1 - Question: What fixture load calculations are to be used for restaurant that stops serving food at 9:30pm and then is used as a bar until 2:00am? Is this a restaurant or a nightclub for occupant load?

Answer: The most restrictive condition must be applied for occupant load count per section 102.1 of the 2012 NC Plumbing Code.

102.1 General. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern. Where, in any specific case, different sections of this code specify different materials, methods of construction, or other requirements, the most restrictive shall govern.

200 Chapter 2 Definitions

300 Chapter 3 General Regulations

301.3 - Question: Can outdoor sinks that are tied into the plumbing system water supply dump the sink waste directly into the yard without connecting into the waste water system for the home?



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

Answer: No, The sinks must drain into the home waste water drainage system if there is any food prep, soap or detergent waste in the sink waste water.

301.3 Connections to the sanitary drainage system: All Plumbing fixtures, drains, appurtenances and appliances used to receive or discharge liquid wastes or sewage shall be directly connected to the sanitary drainage system of the building or premises, in accordance with the requirements of this code.

303.1 - Question: What are the identification requirements for plumbing fixtures? More specifically shower valves.

Answer: Section 303.1 requires each length of pipe and each pipe fitting, trap, fixture, material and device in a plumbing system to bear the identification of the manufacturer and the standard to which it was manufactured.

Recently we some shower valves that were in question, as the valve itself had no markings, manufacturer or standard. After much discussion between Mecklenburg County Code Enforcement, NCDOL and IAPMO, it was determined the identification can be on the trim for the shower, if the valve and trim are listed together.

See attachment

305.5 - Question: Is sliding a piece of split tubing over a pipe acceptable as a pipe sleeve through a foundation wall per section 305.5?

Answer: No, Section 305.5 requires the use of a pipe sleeve two (2) pipe sizes larger than the sleeved pipe or a relieving arch when pipe passes through a foundation wall.

305.5 Pipes through or under footings or foundation wall. Any pipe that passes within 12 inches under a footing or through a foundation wall shall be provided with a relieving arch, or a pipe sleeve shall be built into the foundation wall. The sleeve shall be two (2) pipe sizes greater than the pipe passing through the wall. Piping shall not be run under pier footings (refer to section 307)



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

305.6 - Question: Is it required to insulate thermal expansion tanks that are installed in residential garages? After all, there is very little if any water that would occupy space in the tank. Should any freezing occur, there would be ample room for any expansion within the tank.

Answer: The ruling from this department on insulating appliances in a garage has been; if the water piping must be insulated, then the expansion tank does as well. NCDOL has concurred with this interpretation and they state “if exposed inside an unheated residential garage, it must be insulated”

305.8 - Question: I am constructing an ADA shower. Some of the piping will be behind the blocking for the grab bars. Will plates be required?

Answer: Section 305.8 doesn't address blocking, but the intent is there. If the piping is installed with 1.5 inches of the front of a framing member, then protection is required. For blocking, if you are using a 2x blocking, then protection would not be required as the 2x is 1.5 inches thick. If something less than 2x blocking is used, then protection could be required depending on where the pipe is installed in relation to the front of the blocking.

305.8 Protection against physical damage. In concealed locations where piping, other than cast-iron or galvanized steel, is installed through holes or notches in studs, joists, rafters or similar members less than 1 1/2 inches (38 mm) from the nearest edge of the member, the pipe shall be protected by steel shield plates. Such shield plates shall have a thickness of not less than 0.0575 inch (1.463 mm) (No. 16 gage). Such plates shall cover the area of the pipe where the member is notched or bored, and shall extend a minimum of 2 inches (51 mm) above sole plates and below top plates.

312.9 - Question: What inspections are required on a custom built shower pan?



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

Answer: The plumbing contractor is required to water test the pan with a minimum 2" of standing water. The contractor should call in for a "rough" inspection with "shower pan" in the remarks field.

The shower pan inspection is a plumbing requirement in the plumbing code.

312.9 Shower liner test. Where shower floors and receptors are made water-tight by the application of materials required by Section 417.5.2, the completed liner installation shall be tested. The pipe from the shower drain shall be plugged water tight for the test. The floor and receptor area shall be filled with potable water to a depth of not less than 2 inches (51 mm) measured at the threshold. Where a threshold of at least 2 inches (51 mm) high does not exist, a temporary threshold shall be constructed to retain the test water in the lined floor or receptor area to a level not less than 2 inches (51 mm) deep measured at the threshold. The water shall be retained for a test period of not less than 15 minutes, and there shall not be evidence of leakage.

400 Chapter 4 Fixtures, Faucets & Fittings

403.1 - Question: DMV requires me to have a building for sales records on my car sales lot, do I have to install a toilet room in the building?

Answer: If the records storage building is unheated, accessed only periodically can only used for record storage, then it can meet the requirements of footnote (N) of table 403.1 of the NC Plumbing Code and a toilet room is not required.

Table 403.1 – MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES

n- Unheated storage building which is used periodically are not required to have toilet rooms.

If the records storage building is used to negotiate sales with the public or the public enters the building for business reasons, then the building is classified as Business Occupancy and a toilet room is required to be installed. If an employee occupies the building



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

403.1 - Question: What are the requirements to be exempt a “storage” occupancy from furnishing plumbing fixtures?

Answer: The project shall meet the following criteria:

1. Stand alone storage occupancy.
2. Absolutely “NO” heat provided.
3. Periodic use (once per week max.)

403.2 - Question: If two toilet rooms are required, one male and one female, can they both be unisex bathrooms?

Answer: Under the current plumbing code requirements where unisex toilet rooms scoping requirements are not met in section 403.2, they would have to be separated between male and female. However, there has been an amendment approved by the building code council effective January 1, 2015 that allows them to be unisex.

Section 403.2 Separate facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

1. Separate facilities shall not be required for dwelling units and sleeping units
2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 25 or less
3. Separate facilities shall not be required in Mercantile occupancies un which the maximum occupant load is 100 or less
4. Except as provided in section 405.3.2
5. Where the code requires only one toilet facility for each sex, two unisex facilities may be substituted for separate facilities.



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

403.4 - Question: May tenants access their restroom facilities from outside the structure where they may be subject to the elements?

Answer: No, Sections 403.4, 403.5 and 403.6 stipulate the facilities must be within the building or tenant space and may be located on the floor above or below the tenant space. There are a few exceptions such as guard shack, kiosk and storage structures within 500 feet and under the same ownership, lease or control.

405.3.1 - Question: What is the side wall clearance for a lavatory in a one and two family dwelling?

Answer: In a commercial structure, the side wall clearance is 15 inches, but for single family you are referred to Figure R307.1. That figure does not indicate a minimum side wall clearance. This would only apply to one and two family dwellings and townhouses.

417.4 - Question: I added caulk to my shower drain to get a better seal. The inspector turned my down because he said it blocked the weep holes. What does that matter?

Answer: Section 417.4, requires the shower drain to have weep holes. These holes allow water that made it through the grout bed to drain. Adding caulk blocks these holes. Also, the shower drains are designed to clamp and seal around the shower liner, adding caulk to cause the drain not clamp properly and leak.

417.4 Shower compartments. Shower compartments shall conform to Table 417.4 and shall have approved shower pan material or the equivalent thereof as determined by the plumbing official. The pan shall turn up on three sides at least 2 inches (51 mm) above the finished curb level. The remaining side shall wrap over



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

the curb. Shower drains shall be constructed with a clamping device so that the pan may be securely fastened to the shower drain thereby making a watertight joint. Shower drains shall have an approved weephole device system to ensure constant drainage of water from the shower pan to the sanitary drainage system. There shall be a watertight joint between the shower and drain and trap. Shower receptacle waste outlets shall be not less than 2 inches (51mm) and shall have a removable strainer.

500 Chapter 5 Water Heaters

502.8 - Question: Can a gas water heater be installed in the attic, where the attic access is a pull down stair located in a closet of a bedroom?

Answer: Yes, nothing prohibits the attic access from being in the closet. Section 502.8 states the water heater cannot be installed in the closet off the bedroom, unless the door is weather stripped and is equipped with a self closer. In this case the water heater is installed in the attic, not the closet.

502.8 Prohibited installations. Water heaters, (using solid, liquid or gas fuel) with the exception of those having direct vent systems, shall not be installed in bathrooms and bedrooms or in a closet with access only through a bedroom or bathroom. However, water heaters of the automatic storage type may be installed as replacement in a bathroom, when approved by the plumbing official, provided they are vented and supplied with adequate combustion air.

Exception: When a closet, having a weather-stripped solid door with an approved closing device, has been designed exclusively for the water heater and where all air for combustion and ventilation is supplied from outdoors.

504.6 - Question: Can a water heater T&P discharge to a wood floor over a crawlspace?

Answer: No, Per the NCDOL interpretation dated August 28, 2015. if the floor over the crawl space has wood joists, flooring or subflooring, the water heater



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

relief valve discharge should discharge through a visible air gap in the space the water heater is in and according to all of the requirements of section 504.6
See attached interpretation from NCDOL

504.7 - Question: Are water heater pans required for a water heater installed over a vented crawl space?

Answer: Technically the answer is no. Section 504.7 only requires a pan over unventilated crawl spaces. However, section 504.6 #6 states the T&P discharge cannot cause structural damage. Installing a pan is the simplest method for handling the discharge of the T&P.

See attached DOI interpretation

600 Chapter 6 Water Supply and Distribution

603.2 - Question: I want to place my water service and building sewer in the same ditch, but I am being told they have to be separated. How far apart do they have to be?

Answer: Section 603.2 requires a 5 foot separation. There are a few exceptions. The one that helps most is exception #2, if the sewer is constructed with materials from Table 702.2, then the water service and sewer can be in the same trench and no separation is required.

603.2 Separation of water service and building sewer. Water service pipe and the building sewer shall be separated by 5 feet (1524 mm) of undisturbed or compacted earth.

Exceptions:

1. The required separation distance shall not apply where the bottom of the water service pipe within 5 feet (1524 mm) of the sewer is a minimum of 12 inches (305 mm) above the top of the highest point of the sewer and the pipe materials conform to Table 702.3.



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

2. Water service pipe is permitted to be located in the same trench with a building sewer, provided such sewer is constructed of materials listed in Table 702.2.

3. The required separation distance shall not apply where a water service pipe crosses a sewer pipe, provided the water service pipe is sleeved to at least 5 feet (1524 mm) horizontally from the sewer pipe centerline on both sides of such crossing with pipe materials listed in Table 605.3, 702.2 or 702.3.

606.2 - Question: Are shut off valves required for lavatories?

Answer: Yes, Section 606.2 requires shutoff valves on the fixture supply to each plumbing fixture other than bathtub and showers.

606.2 Location of shutoff valves. Shutoff valves shall be installed in the following locations:

1. On the fixture supply to each plumbing fixture other than bathtubs and showers.
2. Deleted.
3. On the water supply pipe to each appliance or mechanical equipment.

607.3 - Question: When are thermal expansion devices required?

Answer: These devices are required on distribution systems containing a water heater and a backflow or check valve that would prohibit the expanding water from backing up into the main OR if the water main pressure exceeds the pressure rating of the T&P valve.

607.3 Thermal expansion control. A means of controlling increased pressure caused by thermal expansion shall be provided where required in accordance with Sections 607.3.1 and 607.3.2.

607.3.1 Pressure-reducing valve. For water service system sizes up to and including 2 inches (51 mm), a device for controlling pressure shall be installed where, because of thermal expansion, the pressure on the downstream side of a pressure-reducing valve exceeds the pressure-reducing valve setting.



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

607.3.2 Backflow prevention device or check valve. Where a backflow prevention device, check valve or other device is installed on a water supply system utilizing storage water heating equipment such that thermal expansion causes an increase in pressure, a device for controlling pressure shall be installed.

608.3 - Question: Does a humidifier that is connected to the water supply, require backflow protection?

Answer: Yes, Section 608.3 NCPC requires all devices, appurtenances, appliances and apparatus serving a special function to be provided with backflow protection.

608.3 Devices, appurtenances, appliances and apparatus. All devices, appurtenances, appliances and apparatus intended to serve some special function, such as sterilization, distillation, processing, cooling, or storage of ice or foods, and that connect to the water supply system, shall be provided with protection against backflow and contamination of the water supply system. Water pumps, filters, softeners, tanks and all other appliances and devices that handle or treat potable water shall be protected against contamination.

700 Chapter 7 Sanitary Drainage

701.4 - Question: I was turned down on plan review for my elevator drain going through an oil separator and then to storm? Why?

Answer: The local interpretation only allows elevator drainage by means of an oil minder pump to discharge to storm. If protected with an oil separator, it must go to sanitary.

INTERPRETATION:

The installation of a floor drain with or without a sewage pump, in elevator shafts utilizing cable driven systems, may have their effluent, discharge to the sanitary sewer system. Sump pumps shall discharge through an air gap to an approved waste receptor. Pumps/tanks discharging by means of a direct connection to the



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

sanitary drainage system shall be of the sealed gasketed(ejector) type. Designers may elect to discharge this type of effluent to the storm system.

The installation of a floor drain with or without a sewage pump in elevator shafts utilizing hydraulic fluid shall have their effluent discharge to the sanitary sewer system. Sump pumps shall discharge through an air gap to an approved waste receptor. Pumps/tanks discharging by means of a direct connection to the sanitary drainage system shall be of the sealed gasketed (ejector) type. Oil separation protection is required per 1003.4, approved methods are an approved oil separator or pumps utilizing oil detector technology (i.e. Oil Minder).

Exception: Pumps utilizing oil detector technology (i.e., Oil Minder) or systems utilizing biodegradable oils may be submitted for approval and if approved, have their discharge terminate in the storm system.

704.5 - Question: We are removing a bathroom in a building and were going to cap the drains below the slab, but I am being told we have to put cleanouts there.

Answer: Section 704.5, prohibits dead ends with installation or removal of the drainage system. A cleanout can be installed and it will not be considered a deadend.

704.5 Dead ends. In the installation or removal of any part of a drainage system, dead ends shall be prohibited. Cleanout extensions and approved future fixture drainage piping shall not be considered as dead ends.

DEAD END. A branch leading from a soil, waste or vent pipe; a building drain; or a building sewer, and terminating at a developed length of 2 feet (610 mm) or more by means of a plug, cap or other closed fitting.

800 Chapter 8 Ind./Special Waste

900 Chapter 9 Vents



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

909.4 - Question: If you have multi-story wet vent and there is a bathroom group that connects to the building drain after the base of the stack. It this bathroom group used when figuring the vent stack size with Table 909.4.

Answer: No, see email from Bill Moeller. The bathroom group connected to the building drain is separate and does not contribute to the stack load.

911.1 - Question: I am reviewing a plan with circuit vents. Circuit vents allow a maximum of 8 fixtures. The designer provided 8 waterclosets on the circuit vent, but added 2 emergency floor drains also. He said they don't count because they have a DFU of zero. How do we look at this?

Answer: Section 911 states a maximum of 8 fixtures. An emergency floor drain has a DFU of zero per Table 709.1, but it is still a fixture. The emergency floor drains would each count as one of the 8 fixtures allowed.

911.1 Circuit vent permitted. A maximum of eight fixtures connected to a horizontal branch drain shall be permitted to be circuit vented. Each fixture drain shall connect horizontally to the horizontal branch being circuit vented. The horizontal branch drain shall be classified as a vent from the most downstream fixture drain connection to the most upstream fixture drain connection to the horizontal branch.

1000 Chapter 10 Traps and Interceptors

1003.1 - Question: I am designing a strip shopping center, I am being told the tenants are not allowed to share a large grease interceptor. I thought if the interceptor was over 500 gallons, you didn't inspect it?

Answer: If the interceptor is over 500 gallons, it is exempt from the plumbing code. However we still inspect all piping to and from the interceptor. Sharing of a grease interceptor is not allowed, except for Mall Food courts.



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

1003.3.1 - Question: What fixtures are required to go through a grease collection device?

Answer: An interceptor is required to receive the drainage from fixtures and equipment with grease-laden waste located in food preparation areas.

Examples:

Floor drains in the kitchen area

3 compartment sinks

Prep Sinks

Can wash

1003.3.1 Grease interceptors and automatic grease removal devices required. A grease interceptor or automatic grease removal device shall be required to receive the drainage from fixtures and equipment with grease-laden waste located in food preparation areas, such as in restaurants, hotel kitchens, hospitals, school kitchens, bars, factory cafeterias and clubs. Fixtures and equipment shall include pot sinks, prerinse sinks; soup kettles or similar devices; wok stations; floor drains or sinks into which kettles are drained; automatic hood wash units and dishwashers without prerinse sinks. Grease interceptors and automatic grease removal devices shall receive waste only from fixtures and equipment that allow fats, oils or grease to be discharged.

1003.4 - Question: Would a stereo install bay in a Big Box Store, require oil/water separators?

Answer: No! Only engine/transmission repair and oil change establishments where there are floor drains subject to an oily environment. Occupancies without oil and/or bays without drains would not require a separator.

1003.4 Oil separators required. At repair garages, car-washing facilities, at factories where oily and flammable liquid wastes are produced, separators shall



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

be installed into which all oil-bearing, grease-bearing or flammable wastes shall be discharged before emptying into the building drainage system or other point of disposal.

1100 Chapter 11 Storm Drainage

Appendix

Policy

Policy - Question: How much roughing is required on a residential bathroom installed in a basement “for future”?

Answer: Future rough piping shall include all piping below the slab, a stub for the vent and a stub for the building drain and water distribution if not accessible later. Should the future bath require a sewage lift to reach the drainage system and the desire is to locate this sewage lift within the structure, then the tank and pump shall be included a part of the future rough piping

Policy - Question: When do I need a permit to repair a water service line?

Answer: The department has a local interpretation for "damage repair" of a water service line. No permit is required if the repair is limited to 5 feet or less of line. Please note this only applies to damage repair and not line moves, maintenance, etc.

Policy - Question: Does the Code require a drain in a dumpster pad?

Answer: No, but if the owner/designer wishes to provide a drain, then the 2” drain (min.) shall discharge to the sanitary system via a grease interceptor, and



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

the area around the pad shall be sloped away (or curbed) from the pad so the drain does not receive water other than that which falls directly in the pad.

Policy - Question: When does a condensing water heater or furnace need a neutralizer? Who inspects the condensate drain?

Answer: If manufacturer states that their condensate will be below PH 6, then they must have a neutralizer. At this point they can either go to sanitary, outdoors or other approved means of disposal, as it is now PH neutral(7). It will all depend on what the manufacturer's installation instructions of the water heater/furnace says.

The plumbing inspector will check all plumbing connections. The mechanical inspector will check the gas line, venting (if applicable) and the condensate (if applicable)

Policy - Question: Can a plumbing make their own neutralizer cartridge for condensing water heaters/furnaces? It is just lime inside a pipe

Answer: No, the neutralizer cartridges must be listed.

Policy - Question: What piping is allowed to be installed during the Shell?

Answer: Plumbing during the SHELL PHASE is limited to a building sewer, a building water service, a building drain and associated piping below the concrete slab, a water distribution MAIN (below or above grade) with associated service valves, and roof drains/scuppers. NO piping other than that listed previously, equipment or fixtures above the slab are allowed. Also, the Plumbing Plan reviewer or the Code Administrator may allow exceptions on a case by case basis. This interpretation is from 2008 and is still used today.

See attached interpretation



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

Policy - Question: I was told I could not use foam core PVC on an ejector pump. Is this true?

Answer: Cellular core PVC is for non-pressure applications. It is designed for Drain, Waste and Vent applications. The outlet of the pump is considered positive pressure. In the event of a blockage, pressure can build in the pipe and cause failure. A pressure rated pipe would be required up to the junction with the branch or building drain.

Policy - Question: What piping is allowed to be installed during the Shell?

Answer: Plumbing during the SHELL PHASE is limited to a building sewer, a building water service, a building drain and associated piping below the concrete slab, a water distribution MAIN (below or above grade) with associated service valves, and roof drains/scup

Other - Question: I am inspecting a warehouse and they are installing a single urinal in an existing restroom. They feel the code doesn't require that urinal to be accessible, are they right?

Answer: Yes, Section 1109.2 #4; does not require the urinal to be accessible if it is the only urinal provided.

1109.2 Toilet and bathing facilities. Each toilet room and bathing room shall be accessible. Where a floor level is not required to be connected by an accessible route, the only toilet rooms or bathing rooms provided within the facility shall not be located on the inaccessible floor. At least one of each type of fixture, element, control or dispenser in each accessible toilet room and bathing room shall be accessible.

Exceptions:



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

1. In toilet rooms or bathing rooms accessed only through a private office, not for common or public use and intended for use by a single occupant, any of the following alternatives are allowed:

1.1. Doors are permitted to swing into the clear floor space, provided the door swing can be reversed to meet the requirements in ICC A117.1;

1.2. The height requirements for the water closet in ICC A117.1 are not applicable;

1.3. Grab bars are not required to be installed in a toilet room, provided that reinforcement has been installed in the walls and located so as to permit the installation of such grab bars; and

1.4. The requirement for height, knee and toe clearance shall not apply to a lavatory.

2. This section is not applicable to toilet and bathing rooms that serve dwelling units or sleeping units that are not required to be accessible by Section 1107.

3. Where multiple single-user toilet rooms or bathing rooms are clustered at a single location, at least 50 percent but not less than one room for each use at each cluster shall be accessible.

4. Where no more than one urinal is provided in a toilet room or bathing room, the urinal is not required to be accessible.

5. Toilet rooms that are part of critical care or intensive care patient sleeping rooms are not required to be accessible.

Other Departments - Question: I am new to the area and installed an irrigation system at a single family house. I was turned down for using a double check backflow. The inspector said I had to use a RPZ, where does this requirement come from?

Answer: The requirement is from Charlotte Water. They determine what backflow is required, even for residential irrigation.



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

See attached policy and details

New Product - Question: There is a new polymer water heater pan that is manufactured by Vizco for gas or electric tank style water heaters. Will Mecklenburg County accept them?

Answer: The Vizco "Tough Pan" meets UL94 V2 and complies with ASTM D 84. In addition the 2018 ICC Plumbing code has changed the section for pans and now allows this type of pan.

Mecklenburg County will accept this brand of polymer pan for electric and gas water heater installations.

Please Note: These pans can not be installed in a plenum and they are under the 450 on smoke as required by ASTM E 84, but still over 50 which required for plenum installation.

See attached detail.

Other - Question: Can a food waste grinder be installed in a Type B unit? It could be taken out if/when the bottom of the cabinet is removed to make the unit accessible.

Answer: While the grinder could be removed, that is not the intent of adaptable. The intent is to remove the bottom of the cabinet; the flooring and clearances are suppose to already be in place. A grinder can be installed, but it would need to be out of the required knee clearance.

Other

Other - Question: Can a hose bibb with a vacuum breaker be used in lieu of RPZ for a pool fill?



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

Answer: No, most pool fills are a direct connection which will not work with the hose bibb/vacuum breaker. Per Table 608.1 NCPC, a hose connection vacuum breaker is limited to a maximum size of 1 inch.

Other - Question: There is a manufacturer that makes a FHA plate that is 16 inches, instead of 18; are we allowed to use these?

Answer: Yes, we can find nothing in the code that prohibits the use of a 16 inch FHA plate. Section R602.6.1 only requires the following:

16ga

1.5 inches wide

Not less than eight 10d nails on each side

Must extend a minimum of 6 inches past the opening

Other - Question: Are hose bibs required by the NC Plumbing Code in Residential Construction?

Answer: No, hose bibs are not a required fixture in residential construction and are optional

Other - Question: I am being told that Heat Trace is required on the hot and cold water lines outside the house that hook up to a tankless water heater. Where does that requirement come from?

Answer: The requirement comes from the manufacturer's installation instructions. Many require Heat Trace on the exposed lines.

Other - Question: Are food waste grinders required to go to a grease interceptor?



NC Plumbing Code

1st Qtr. 2015 Code Answers in brown (Jan-Mar) 2nd Qtr. 2015 Code Answers in green (Apr- Jun)
3rd QTR 2015 Code Answers in blue (Jul-Sep) 4th QTR 2015 Code Answers in red (Oct-Dec)

Answer: There is no requirement in the plumbing code that requires a food waste grinder to go an interceptor. Section 1003.3.2 requires a solids interceptor if the a food waste grinder is connected to a grease interceptor.

Charlotte water has no requirement for a grinder to go to a grease interceptor.
(See Email)

If the grinder is installed in a sink that is required to go to a grease interceptor, such as a pre-wash; the requirement of the sink takes precedence and will have to go a grease interceptor. Note in this case, a solids interceptor would then be required.

1003.3.2 Food waste grinders. Where food waste grinders connect to grease interceptors, a solids interceptor shall separate the discharge before connecting to the grease interceptor. Solids interceptors and grease interceptors shall be sized and rated for the discharge of the food waste grinder. Emulsifiers, chemicals, enzymes and bacteria shall not discharge into the food waste grinder.

Other - Question: Does the set screw on a vacuum breaker have to be broken off?

Answer: Yes, we researched several manufacturers and all of the required the set screw to be broken off as part of the installation instructions.